

number of active points down to less than four (unless you started with less than 4 in which case this procedure does not apply at all). This scheme means that as each new point is added, all points determined so far are considered, even those that had previously been marked bad. Thus early "misjudgments" on the part of the system can be corrected later, in light of new point information.

Please amend the first full paragraph on page 25 of the specification to read as follows:

The same bad point detection process, can also be implemented using the rotational linear transform approach. In this case the method is capable of reducing the number of active points down to as low as three (rather than four for the general linear transform approach outlined above). This can be useful when dealing with small sets of active points.

IN THE CLAIMS:

Please amend claims 1-4 and 8-16, and add new claims 17-20, as follows:

1. (Amended) A method for georeferencing a raster map image, comprising:
- displaying a raster map and a georeferenced map;
 - identifying image coordinates associated with at least two points on the raster map;
 - identifying geographic coordinates of points on the georeferenced map that correspond to the points identified on the raster map; and

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determining a mathematical relationship between the image coordinates and the geographic coordinates.

2. (Amended) The method of claim 1, further comprising:
using the mathematical relationship to determine the geographic coordinates of at least one feature on the raster map.

3. (Amended) The method of claim 1, further comprising:
storing the mathematical relationship with the raster map.

4. (Amended) The method of claim 1, further comprising:
manipulating the raster map to display a location on the raster map; and
updating the display of the georeferenced map to display a location identical to the location displayed on the raster map.

8. (Amended) The method of claim 1, wherein the mathematical relationship is represented by a set of general linear functions.

9. (Amended) An apparatus for georeferencing a raster map image, comprising:
means for displaying a raster map and a georeferenced map;
means for identifying image coordinates associated with at least two points on the raster map;

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means for identifying geographic coordinates of points on the
georeferenced map that correspond to the points identified on the raster map;
and

means for determining a mathematical relationship between the image
coordinates and the geographic coordinates.

10. (Amended) The apparatus of claim 9, further comprising:
means for using the mathematical relationship to determine the
geographic coordinates of at least one feature on the raster map.

11. (Amended) The apparatus of claim 9, further comprising:
means for storing the mathematical relationship with the raster map.

12. (Amended) The apparatus of claim 9, further comprising:
means for manipulating the raster map to display a location on the raster
map; and
means for updating the display of the georeferenced map to display a
location identical to the location displayed on the raster map.

13. (Amended) The apparatus of claim 9, wherein the geographic
coordinates are latitude and longitude.

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14. (Amended) The apparatus of claim 9, wherein the raster map and the georeferenced map are displayed on the same computer display.

15. (Amended) The apparatus of claim 9, wherein the corresponding points are marked by a user after visually determining geographically corresponding points.

16. (Amended) The apparatus of claim 9, wherein the mathematical relationship is represented by a set of general linear functions.

17. (New) The method of claim 1 further comprising:
identifying image coordinates associated with at least one point on the raster map;
identifying geographic coordinates of points on the georeferenced map that correspond to the point identified on the raster map; and
revising the mathematical relationship.

18. (New) The method of claim 17, wherein revising further comprises disregarding any points previously identified that are substantially inconsistent with the mathematical relationship.

19. (New) The apparatus of claim 9 further comprising:
means for identifying image coordinates associated with at least one point on the raster map;

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